

REMARKS

Claims 1, 4 - 6, 8 - 9, 12, 13, 15 - 17, 20, 21, 23 - 25, 28, 29, and 31 are pending. Claims 2, 3, 7, 10, 11, 14, 18, 19, 22, 26, 27, and 30 have been cancelled. Claims 1, 4, 6, 8, 9, 12, 15 - 17, 20, 21, 23 - 25, 28, 29, and 31 have been amended. No new matter has been introduced. Reexamination and reconsideration of the present application are respectfully requested.

In the Office Action dated April 11, 2005, the Examiner rejected claims 1 - 31 under 35 U.S.C. § 102(e) as being anticipated by U.S. Published Patent Application 2002/0010866 A1 to McCullough ("the McCullough reference"). The Examiner rejected claims 8, 15, 23, and 31 under 35 U.S.C. § 103(a) as being unpatentable over the McCullough reference in view of U.S. Patent No. 5,987,526 to Morales ("the Morales reference"). These rejections, in so far as they are applicable to the presently pending claims, are respectfully traversed.

Independent claim 25 distinguishes over the cited references. Independent claim 25, as amended, recites:

A system, comprising:  
at least one server network to communicate data;  
**at least two Virtual Network Interface Cards (VNICs) to communicate the data from the at least one server network to an Infiniband architecture;**  
**at least two bridging devices to convert packets useable in the Infiniband architecture to packets useable in an Ethernet architecture utilized by a client network, wherein a first one of the at least two bridging devices transfers the data with a first one of the at least two VNICs; and**  
**at least one intermediate driver, coupled to the at least one server network and to the at least two VNICs, to receive an error message that the first one of the at least two bridging devices is not working, wherein**  
**the at least one intermediate driver provides a fail-over function to maintain a connection between the server network and**

**the client network to allow transfer of data to continue between a second one of the at least two bridging devices and the client network after the error message is received.**

The McCullough reference does not disclose, teach, or suggest the system of claim 25, as amended. The Examiner states that the gateways of the McCullough reference meet the limitations of the bridging devices in claim 25. (*Office Action, page 2*). Specifically, the McCullough reference discloses a public computer network 32, e.g., Internet, where an initiator device (gateway) 60 is connected to one edge of the public network by multiple links. The McCullough reference also discloses that a responder device (gateway) is connected at the other end of the public network by multiple links. A virtual private network (VPN) can be established between the initiator and responder. The VPN can be established utilizing IPsec. (*McCullough, page 3, paragraphs [0047 - 0048].*) The Examiner also states that Fig. 4, and paragraphs 0096, 0098, 0099, 0104, and 106 discloses that at least two bridging devices convert packets usable in one architecture over to a second architecture. (*Office Action, page 3*). Specifically, the McCullough reference discloses that packets can be IPsec encapsulated and/or TCP encapsulated and then transferred over the VPN. (*McCullough, page 7, paragraphs [0098, 0099, 0104, and 0106]*).

Further, the Examiner states that a plurality of inferior virtual circuits disclose at least two VNICs to communicate the data via the first I/O network. (*Office Action, page 2*). Specifically, the McCullough reference discloses that multiple tunnels exist between the Initiator and Responder and make a unified channel. Such a unified channel is called a superior virtual circuit and the individual tunnels are called inferior virtual circuits. An inferior virtual circuit is a peer-to-peer connection between an initiator and a

responder. (*McCullough, page 4, paragraphs [0055].*)

The Examiner also states that the device driver disclosed in the paragraph 119 of the McCullough reference is the at least one intermediate driver of claim 35. Specifically, the McCullough reference discloses, in Fig. 14, a block diagram of a gateway system, which includes multiple device drivers for devices such as NICs, UARTs, timers, etc. (*McCullough, paragraph [0119]*). The Examiner also states that paragraph [0024] of the McCullough reference discloses that the intermediate driver provides a fail over function to maintain a connection between the server network and the client network. (*Office Action, page 3*). The McCullough reference specifically discloses that an advantage of the present invention is that a drop or failed connection can be re-established while the VPN is operating. (*McCullough, page 2, paragraph [0024]*).

The McCullough reference does not disclose a system including at least one server network to communicate data and **at least two Virtual Network Interface Cards (VNICs) to communicate the data from the at least one server network to the Infiniband architecture**. The Examiner states that the Infiniband architecture is a design choice and thus is disclosed by the McCullough reference. (*Office Action, page 3*). The applicant respectfully disagrees because the McCullough reference does not disclose or mention the Infiniband architecture. The applicants request that the Examiner specifically identifies where the Infiniband architecture could be utilized in the McCullough reference. In addition, the inferior virtual circuits of the McCullough reference are not the same as **the at least two VNICs** because the inferior virtual circuits are the tunnels established between an initiator gateway and a responder

gateway, whereas the VNIC of claim 25 transfers data between a server network and an Infiniband architecture. In other words, the inferior virtual circuits are between two gateways on the Internet, not between a server network and a Infiniband fabric or architecture, as recited in claim 25.

Claim 25, as amended, further distinguishes over the McCullough reference. The McCullough reference does not disclose a system including **at least two bridging devices to convert packets useable in the Infiniband architecture to packets useable in an Ethernet architecture utilized by a client network, wherein a first one of the at least two bridging devices transfers the data with a first one of the at least two VNICs**. The McCullough reference does not disclose an Infiniband architecture so the McCullough reference cannot disclose a bridging device to convert packets usable in the Infiniband architecture to the Ethernet architecture.

Claim 25 further distinguishes over the McCullough reference. The McCullough reference does not disclose a system including **at least one intermediate driver, coupled to the at least one server network and to the at least two VNICs, to receive an error message that the first one of the at least two bridging devices is not working**. The Examiner states that the McCullough reference's device driver in a small network gateway meets the limitation of the intermediate driver recited in claim 25. The McCullough device driver is not the same as an **intermediate driver coupled to the at least one server network and to the at least one VNIC**, as recited in claim 25, because there is no disclosure that the McCullough device driver is coupled to at least two VNICs. Even assuming that the VNIC limitation (discussed above) were met by the inferior virtual circuits of the McCullough reference, which it is not, there still is no

disclosure that the McCullough device driver is **coupled to or related to the VNIC** (e.g., inferior virtual circuit). In addition, the McCullough device driver is in a gateway, which the Examiner has stated are the bridging devices, as recited in claim 25. Thus, the McCullough reference's device driver cannot meeting the limitation of being coupled to the at least one server network and the at least two VNICs. The McCullough reference's device driver is in the gateway, which is akin to the bridging devices, and this is not between the server network and the at least two VNICs. Further, there is no disclosure that an **intermediate driver receives an error message indicating that the first one of the bridging devices is not working**.

Further, the McCullough reference does not disclose a system including **the at least one intermediate driver provides a fail-over function to maintain a connection between the server network and the client network to allow transfer of data to continue between a second one of the at least two bridging devices and the client network after the error message is received**. The Examiner states that the McCullough reference's disclosure of re-establishing a dropped or failed connection meets the limitation of providing a fail-over function. (*Office Action, page 3*). The re-establishing of a dropped or failed connection is not the same as a fail over function where the transfer of data continues between a second one of the at least two bridging devices because the McCullough reference is not specifically disclosing a second bridging device (i.e., gateway) is utilized when a re-establishment occurs. Re-establishing means utilizing the same existing pathway, and re-establishing the connection, not looking for a new pathway. Accordingly, the applicants respectfully submits that claim 25, as amended, further distinguishes over the McCullough

reference.

The Morales reference does not make up for the deficiencies of the McCullough reference. The Examiner utilizes the Morales reference to disclose that a switch/router/gateway with a plurality of virtual connections is used for backup. (*Office Action, page 5*). However, the Morales reference still does not disclose a system including at least one server network to communicate data, **at least two Virtual Network Interface Cards (VNICs) to communicate the data from the at least one server network to an Infiniband architecture, at least two bridging devices to convert packets useable in the Infiniband architecture to packets useable in an Ethernet architecture utilized by a client network, wherein a first one of the at least two bridging devices transfers the data with a first one of the at least two VNICs; and at least one intermediate driver, coupled to the at least one server network and to the at least two VNICs, to receive an error message that the first one of the at least two bridging devices is not working.**

The Morales reference is directed towards a first asynchronous transfer mode (ATM) network and a second ATM network, where if a failure is detected, then a second pathway is utilized for the data. There is no disclosure in the Morales reference that an Ethernet and/or a Infiniband architecture are utilized so that bridging devices could convert packets in a usable format for the Infiniband architecture to a usable format for the Ethernet architecture. In addition, there is no disclosure of an intermediate driver, or that an intermediate driver receives an error message. Accordingly, applicant respectfully submits that claim 25, as amended, distinguishes over the Morales reference.

Claim 1, 9, and 17, all as amended, recite limitations similar to claim 25, as amended.

Accordingly, applicant respectfully submits that claims 1, 9, and 17 distinguish over the McCullough / Morales combination for reasons similar to those discussed above in regard to claim 25, as amended.

Claims 4, 6, 8, 12, 15, 16, 20, 21, 23, 24, 28, 29, and 31 depend, indirectly or directly, on claims 1, 9, 17, and 25. Accordingly, applicant respectfully submits that claims 4, 6, 8, 12, 15, 16, 20, 21, 23, 24, 28, 29, and 31 distinguish over the McCullough / Morales reference combination for the same reasons as those discussed above in regard to claim 25.

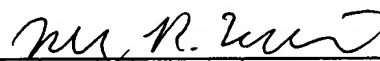
Applicant believes that the foregoing amendments place the application in condition for allowance, and a favorable action is respectfully requested. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call either of the undersigned attorneys at the Los Angeles telephone number (213) 488-7400 to discuss the steps necessary for placing the application in condition for allowance should the Examiner believe that such a telephone conference would advance prosecution of the application.

Respectfully submitted,

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Date: July 11, 2005

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